



Potential Flood Information

Indonesian Experience

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OUTLINE

- OVERVIEW OF INDONESIAN CLIMATE
- FLOOD POTENTIAL IMPACT IN INDONESIA
- BMKG FLOOD INFORMATION COOPERATIVE PROGRAMS
 - NATIONAL COLLABORATION
 - J-FEWS (JCP)
 - CIFDP (WMO)



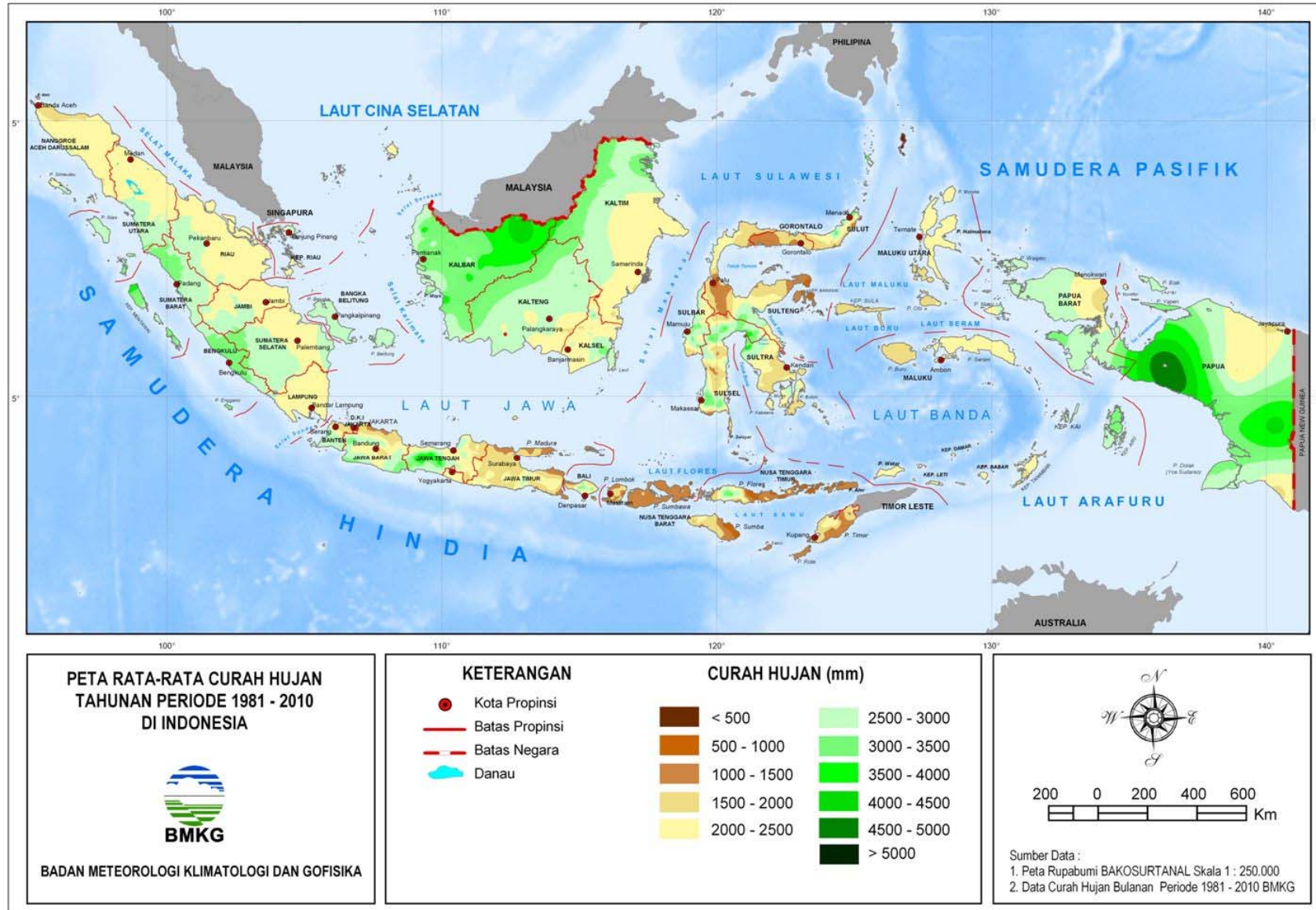
INDONESIA: THE FACTS



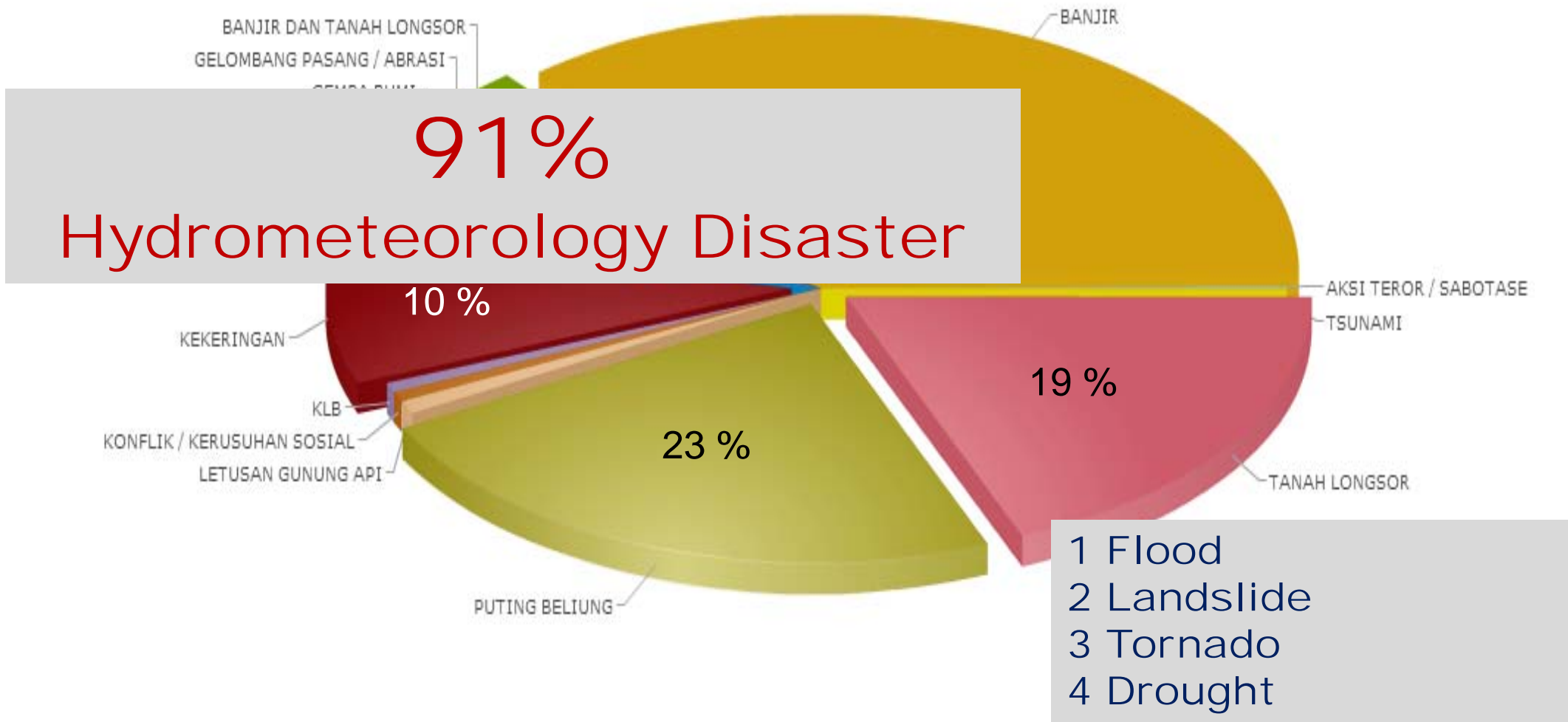
- Archipelagic country ~ 17,504 islands (10,000 small islands), right at the equatorial line;
- Has > 250 million population mostly are farmers and fishermen.
- Flanked by 2 ocean (India and Pacific) and 2 continents (Australia and Asia); --

- Exposed by 3 major rain patterns, 2 monsoon drivers, 342 climatic zones ---→ climate-sensitive sectors including agriculture

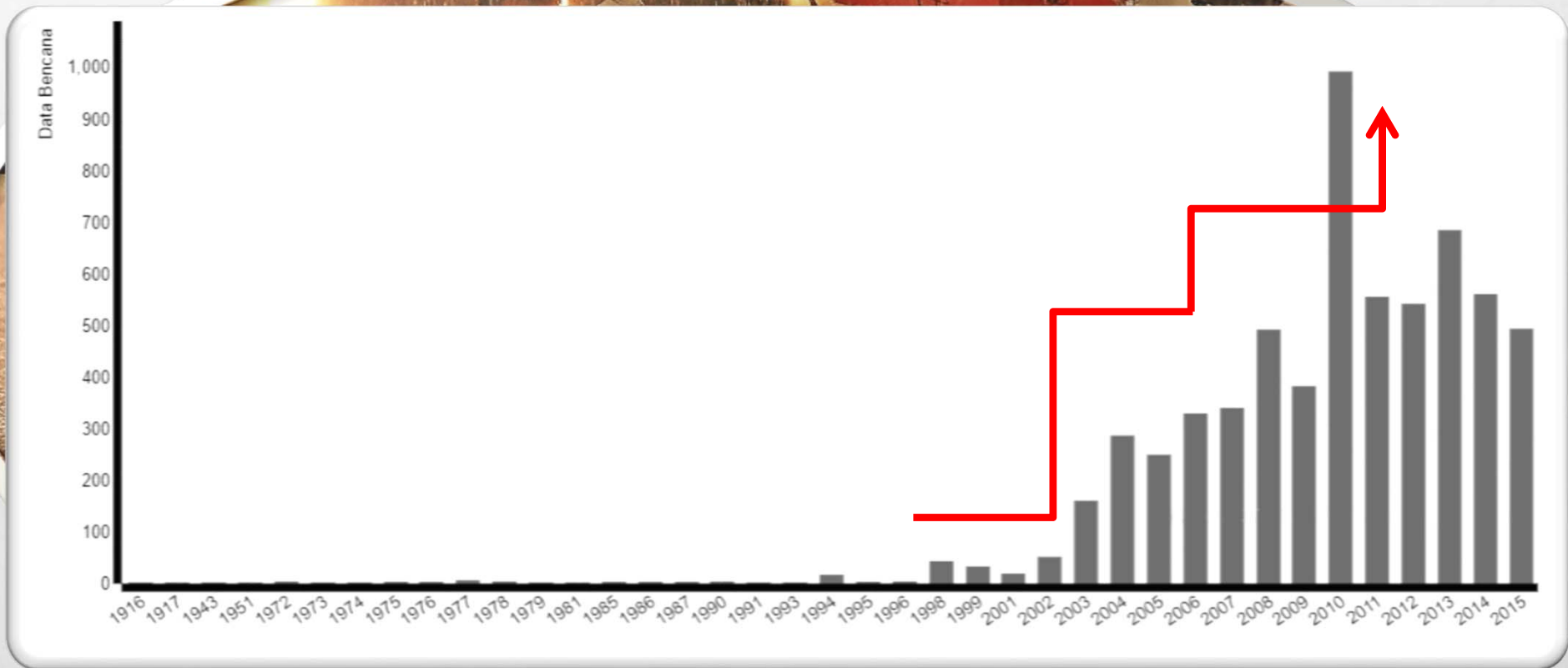
ANNUAL RAINFALL DISTRIBUTION MAP PERIODE 1981-2010



COMPARISON OF TOTAL DISASTER EVENTS In INDONESIA on 1815-2016



FLOOD EVENTS IN INDONESIA SINCE THE 1915 S / D 2015 (DIBI BNPB, 2016)



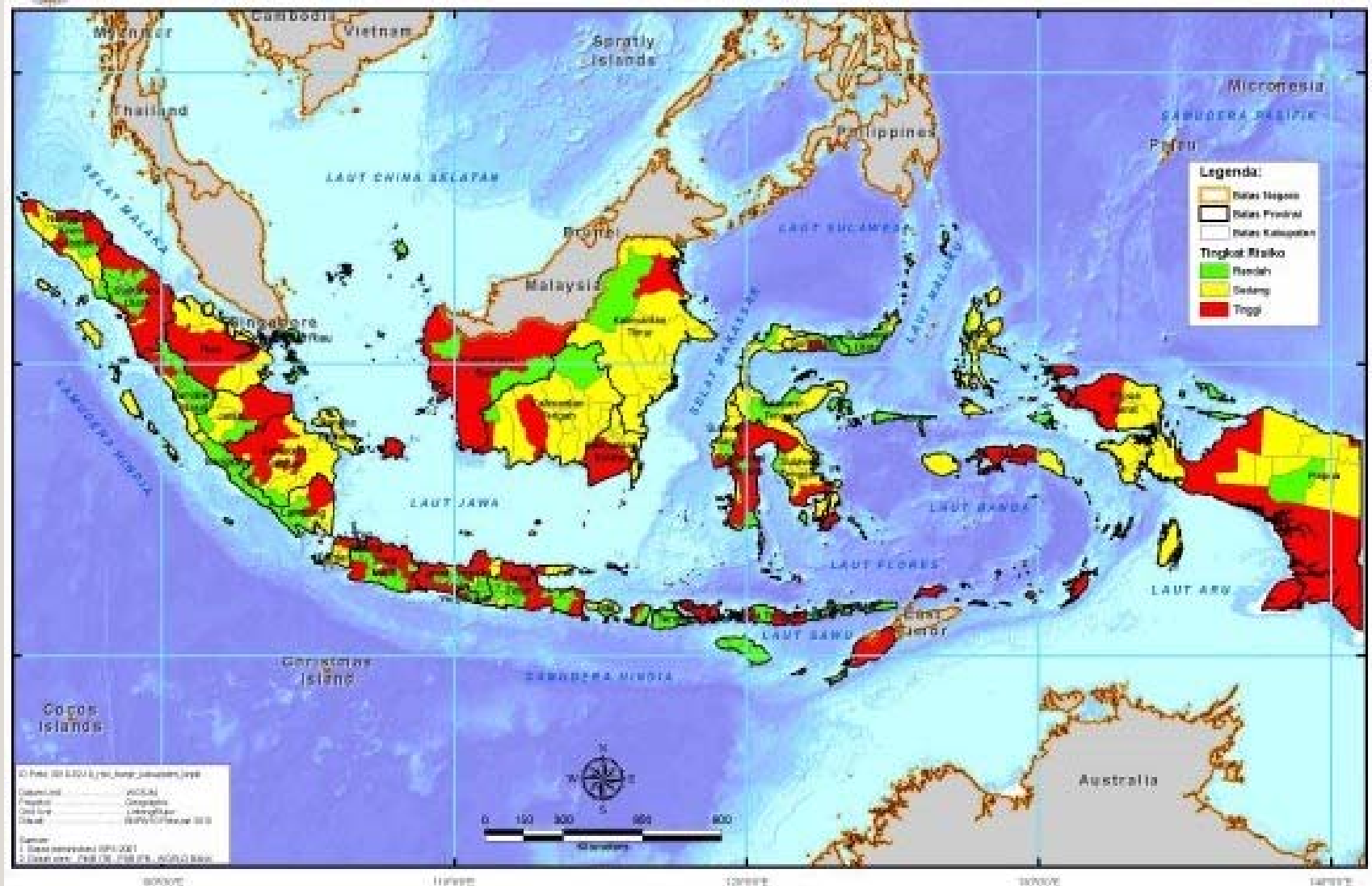
The distribution of flood events in Indonesia since the 1915 s / d in 2015, showed an increasing in the number of flood events per year.

FLOOD IMPACT IN INDONESIA (1915-2016)



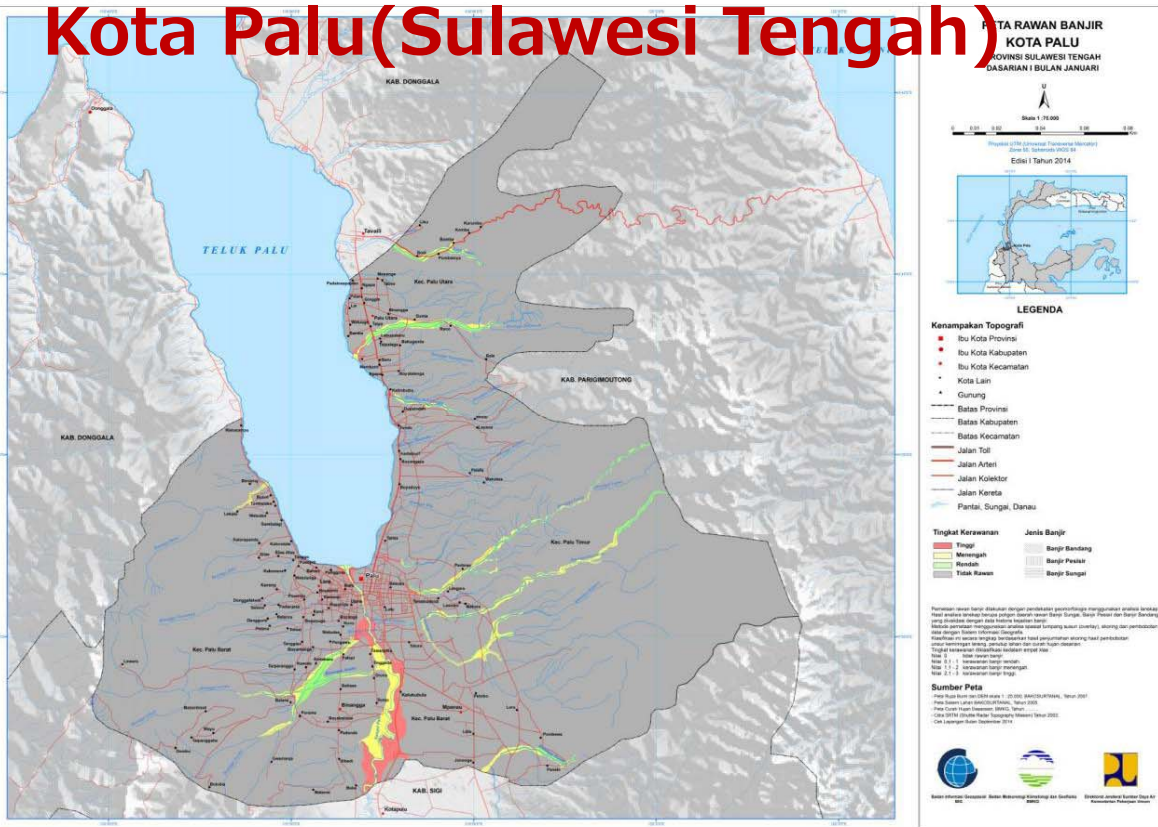
INDONESIAN FLOOD RISK MAP

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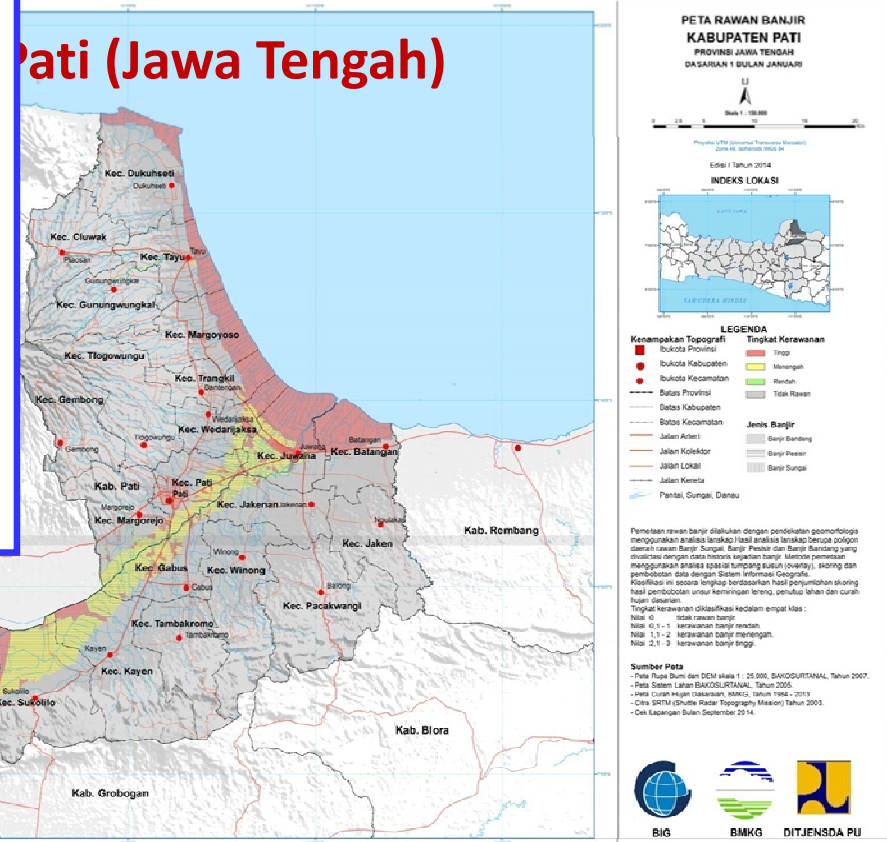
Source : BNPB

Kota Palu (Sulawesi Tengah)



INDONESIAN DISTRICT

Pati (Jawa Tengah)



FEWS DEVELOPER (JCP-1)

INDONESIA

- BMKG
- PusAir

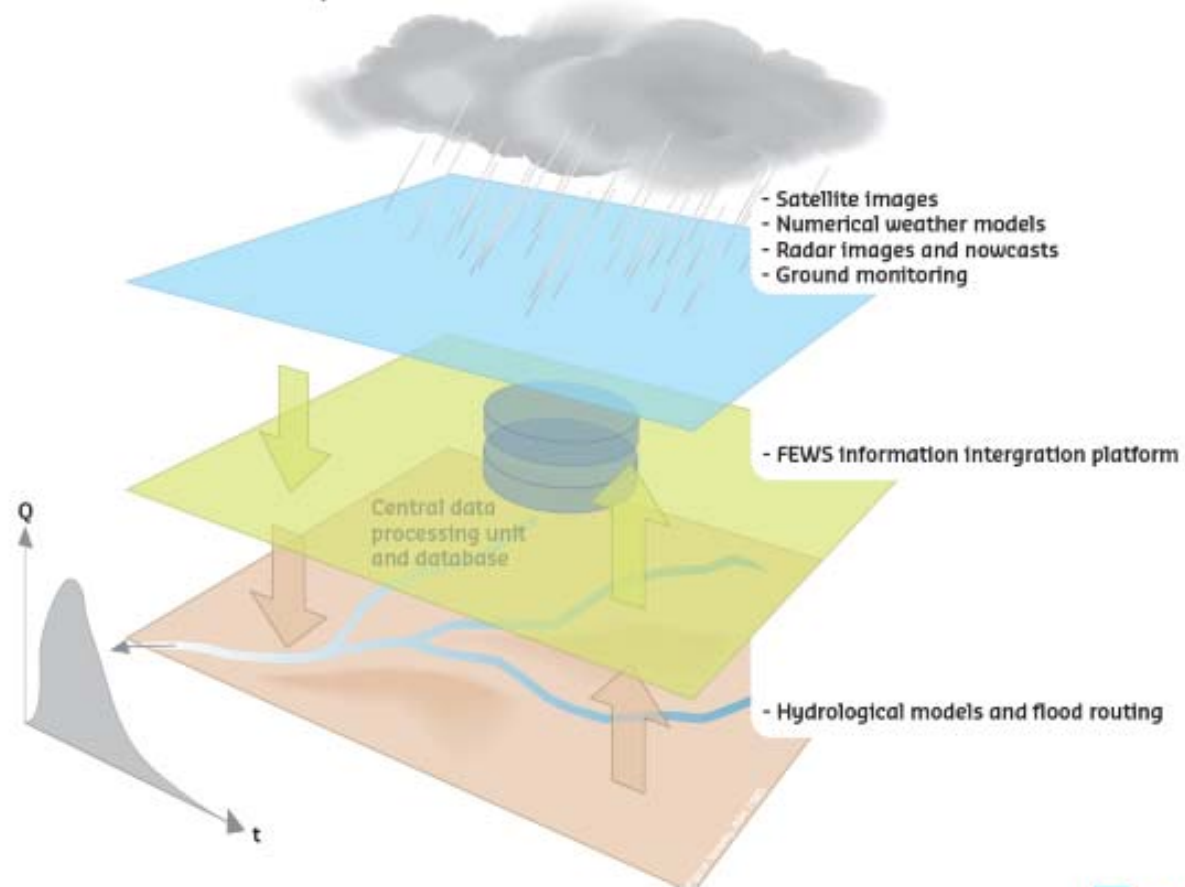
NETHERLAND

- Deltares
- KNMI

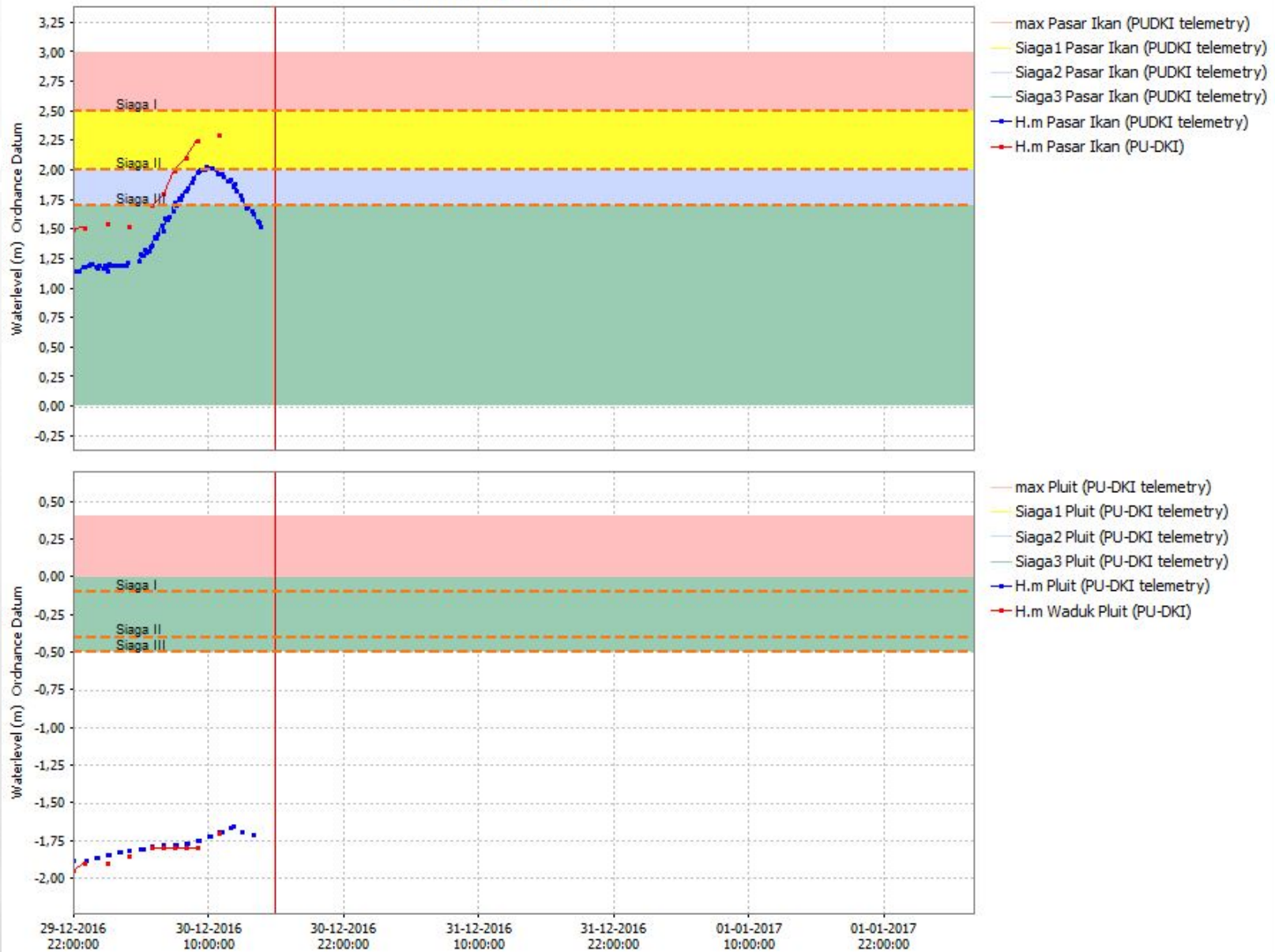
WORKFLOW FEWS

The Delft-FEWS Platform

Delft-FEWS platform

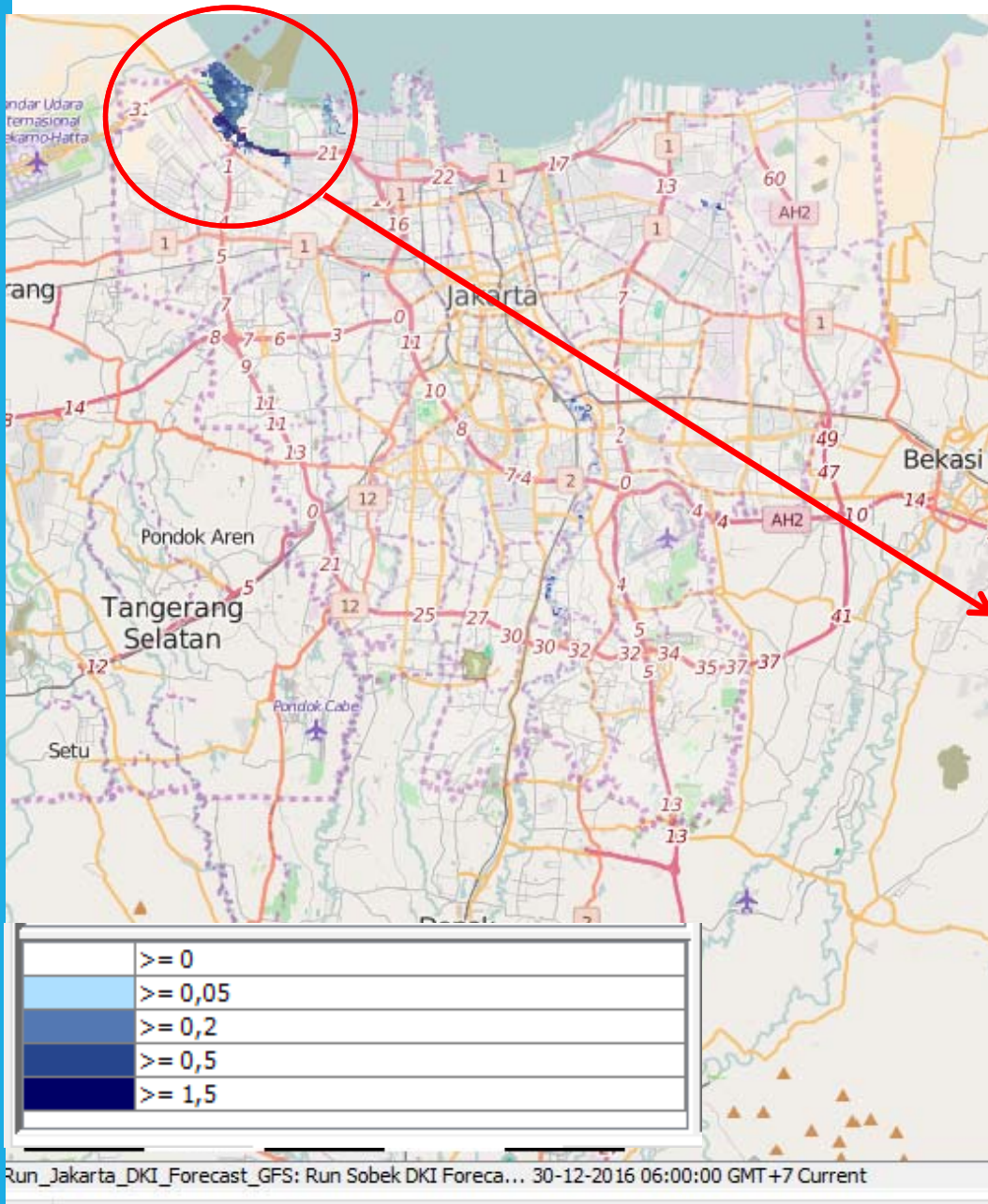


Ciliwung Lama



PRODUCT ANALYSIS OF JAKARTA FLOOD EARLY WARNING SYSTEM (J-FEWS)

30 DECEMBER 2016

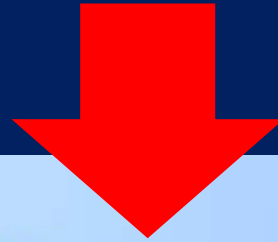


FLOOD POTENTIAL AREA	THE WATER LEVEL ABOUT
LUAS (WIDE) AREA	
Kamal Muara, Pantai indah utara	0.18 m to 1.23 m
KECIL (SMALL) AREA	
Bukit Duri, Kampung Melayu	0,03 m to 0,59 m
Tanjung Duren Utara, Daan Mogot, Bojong Indah, Kembangan, Kedaung Kali Angke	0.2 m s/d 0.44 m
Pejaten Timur, Pasar minggu	0,05 m to 0.72 m
Duren Kalibata, Kebon Baru, Cipinang melayu	0.05 m to 0.59 m
Kartini, Gunung Sahari	0.04 m to 0.11 m
Kelapa Gading	0.11 m to 0.63 m



COASTAL INUNDATION FORECASTING DEMONSTRATION PROJECT INDONESIA (CIFDP-I)

PILOT PROJECT



**BOTH LOCATIONS HAVE FREQUENT FLOOD FROM
COASTAL INUNDATION**

COASTAL INUNDATION OCCURRENCE



JAKARTA

SEMARANG





COASTAL INUNDATION PROBLEM IN SEMARANG





WAY FORWARD...

BMKG NEED TO ...

- improve Flood Information warning system.
- providing climate impact-based information and risk-based warning.



THANK YOU

Terima Kasih



Potential Map of Flood Information product is a result from collaboration by BMKG, Public Work Ministry and BIG which is expected to guide sectoral planing and preparadness